

IN THE CLAIMS:

Please cancel claims 1-13.

Kindly add the following new claims 14-33:

14. A method for monitoring a contaminated, dirty or inflammable condition within an electrical consumer appliance, comprising:

using a measurement device to measure a parameter that indicates an amount of dust on a surface located within an electrical consumer appliance; and

using an indicator, connected to said measurement device, to indicate when the amount of dust on said surface exceeds an acceptable limit.

15. The method according to claim 14, wherein using a measurement device to measure a parameter that indicates an amount of dust on a surface located within an electrical consumer appliance comprises using said measurement device to measure a parameter that indicates an amount of dust on a surface located within a television set.

16. The method according to claim 15, wherein using an indicator to specify a measurement value that is a function of the measured attenuation of said light beam so as to indicate a thickness of the dust on said surface comprises using said indicator to continuously display said measurement value on an analog scale.

17. The method according to claim 15, wherein using an indicator to specify a measurement value that is a function of the measured attenuation of said light beam so as to indicate a thickness of the dust on said surface comprises using said indicator to continuously display said measurement value by a digital display.

18. The method according to claim 15, wherein using said indicator to indicate when the amount of dust on said surface exceeds an acceptable level comprises delivering at least one of an optical warning signal and an acoustic warning signal when said measurement value exceeds a threshold value.

19. The method according to claim 14, wherein
using a measurement device to measure a parameter that indicates an amount of dust on a surface located within an electrical consumer appliance comprises using an optical measurement device to measure attenuation of a light beam transmitted through the dust that is on said surface located within said electrical consumer appliance, and

using an indicator to indicate when the amount of dust on said surface exceeds an acceptable limit comprises using an indicator to specify a measurement value that is a function of the measured attenuation of said light beam so as to indicate a thickness of the dust on said surface.

20. The method according to claim 19, wherein using an optical measurement device to measure attenuation of a light beam transmitted through the dust that is on said surface located within said electrical consumer appliance comprises using said optical measurement device to measure attenuation of a light beam transmitted through the dust that is on said surface located within a television set.

21. The method according to claim 19, wherein using an optical measurement device to measure attenuation of a light beam transmitted through the dust that is on said surface located within said electrical consumer appliance comprises comparing an output intensity of said light beam with an intensity of a reference light beam that is not transmitted through the dust that is on said surface.

22. The method according to claim 19, wherein using an optical measurement device to measure attenuation of a light beam transmitted through the dust that is on said surface located within said electrical consumer appliance comprises using an optical measurement device to measure

attenuation of a divergent or expanded light beam transmitted along and through the dust and then focused towards a photodetector via a lens that is positioned beyond said surface.

23. The method according to claim 19, wherein using an optical measurement device to measure attenuation of a light beam transmitted through the dust that is on said surface located within said electrical consumer appliance comprises using an optical measurement device to measure attenuation of a light beam transmitted transversely through the dust and reflected from said surface.

24. The method according to claim 14, wherein using a measurement device to measure a parameter that indicates an amount of dust on a surface located within an electrical consumer appliance comprises using a thermal measurement device to measure heat insulating ability for the dust that is on said surface located within said electrical consumer appliance, and

using an indicator to indicate when the amount of dust on said surface exceeds an acceptable limit comprises using an indicator to specify a measurement value that is a function of the measured heat insulating ability so as to indicate a thickness of the dust on said surface.

25. The method according to claim 24, wherein using a thermal measurement device to measure heat insulating ability for the dust that is on said surface located within said electrical consumer appliance comprises using said thermal measurement device to measure heat insulating ability for the dust that is on said surface located within a television set.

26. The method according to claim 24, wherein using a thermal measurement device to measure heat insulating ability for the dust that is on said surface located within said electrical consumer appliance comprises using a heating element to heat said surface and using a temperature sensor to measure temperature of said surface such that heat radiation from said surface is determined, which heat radiation is indicative of the thickness of the dust on said surface.

27. The method according to claim 26, wherein using a heating element to heat said surface and using a temperature sensor to measure temperature of said surface such that heat radiation from said surface is determined comprises heating a reference object, that is not subject to being coated with dust, to the same temperature to which said surface is heated, and then comparing measured temperatures of said surface and said reference object.

28. The method according to claim 14, wherein
using a measurement device to measure a parameter that indicates an amount of dust on a surface located within an electrical consumer appliance comprises using an ultrasound measurement device to measure attenuation of ultrasound energy transmitted through the dust that is on said surface located within said electrical consumer appliance, and

using an indicator to indicate when the amount of dust on said surface exceeds an acceptable limit comprises using an indicator to specify a measurement value that is a function of the measured attenuation of the ultrasound energy so as to indicate a thickness of the dust on said surface.

29. The method according to claim 28, wherein using an ultrasound measurement device to measure attenuation of ultrasound energy transmitted through the dust that is on said surface located within said electrical consumer appliance comprises using said ultrasound measurement device to measure attenuation of ultrasound energy transmitted through the dust that is on said surface located within a television set.

30. The method according to claim 14, wherein
using a measurement device to measure a parameter that indicates an amount of dust on a surface located within an electrical consumer appliance comprises using a pressure sensor to measure superpressure caused by the dust that is on said surface located within said electrical consumer appliance, and

using an indicator to indicate when the amount of dust on said surface exceeds an acceptable limit comprises using an indicator to specify a measurement value that is a function of the measured superpressure so as to indicate a weight of the dust on said surface.

31. The method according to claim 30, wherein using a pressure sensor to measure superpressure caused by the dust that is on said surface located within said electrical consumer appliance comprises using said pressure sensor to measure superpressure caused by the dust that is on said surface located within a television set.

32. The method according to claim 14, wherein
using a measurement device to measure a parameter that indicates an amount of dust on a surface located within an electrical consumer appliance comprises using a strain sensor to measure degree of flexure of a plate, that defines said surface, caused by the dust that is on said surface located within said electrical consumer appliance, and
using an indicator to indicate when the amount of dust on said surface exceeds an acceptable limit comprises using an indicator to specify a measurement value that is a function of the measured degree of flexure of said plate so as to indicate a weight of the dust on said surface.

33. The method according to claim 32, wherein using a strain sensor to measure degree of flexure of a plate caused by the dust that is on said surface located within said electrical consumer appliance comprises using said strain sensor to measure degree of flexure of said plate caused by the dust that is on said surface located within a television set.